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**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA**

15 NATURAL RESOURCES DEFENSE COUNCIL,  
16 INC.; THE HUMANE SOCIETY OF THE UNITED  
17 STATES; CETACEAN SOCIETY INTERNATIONAL;  
18 LEAGUE FOR COASTAL PROTECTION; OCEAN  
19 FUTURES SOCIETY; JEAN-MICHEL COUSTEAU;  
20 and MICHAEL STOCKER,

21 *Plaintiffs*

22 v.

23 REBECCA BLANK, in her official capacity as the  
24 Acting Secretary of the Department of Commerce;  
25 NATIONAL MARINE FISHERIES SERVICE; SAM  
26 RAUCH, in his official capacity as the Acting Assistant  
27 Administrator for Fisheries; JANE LUBCHENCO, in  
28 her official capacity as the Administrator of the National  
Oceanic and Atmospheric Administration;  
DEPARTMENT OF THE NAVY; RAY MABUS, in his  
official capacity as the Secretary of the Navy;  
ADMIRAL JONATHAN GREENERT, in his official  
capacity as the Chief of Naval Operations,

*Defendants.*

FILED

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RICHARD W. WIEKING  
CLERK, U.S. DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

Case No. 12 5380

**COMPLAINT**

MEJ

## INTRODUCTION

1. This action challenges the United States National Marine Fisheries Service's ("NMFS") 2012 decision to authorize and the United States Department of the Navy's ("Navy's") decision to deploy Surveillance Towed Array Sensor System ("SURTASS") Low Frequency Active Sonar ("LFA"), a powerful and highly-controversial global sonar system that will broadcast extraordinarily intense sound waves through as much as 75% of the world's oceans. Specifically, Plaintiffs challenge the August 20, 2012 five-year rule ("Final Rule") authorizing the Navy to conduct LFA transmissions throughout the world's oceans, the annual Letters of Authorization ("LOAs") implementing that Final Rule, as well as the June 2012 final Supplemental Environmental Impact Statement ("SEIS") and August 2012 Biological Opinions on which the Final Rule is based.

2. The adverse impacts on marine animals from the Navy's use of SURTASS LFA, the incredible distances at which harm can occur from the LFA source, and the vast expanse of ocean opened up to this technology are all documented by Defendants' own analyses.<sup>1</sup> Barring relief from the Court, the deployment of SURTASS LFA as authorized will harm thousands of marine mammals, including significant numbers of endangered species such as blue whales, humpback whales, sperm whales, and other species whose numbers are depleted. Impacts from LFA will occur hundreds of miles from the source of the technology. Indeed, during one test of the LFA system, the Navy calculated LFA sound waves at a level known to disturb gray whales more than 300 miles from the source (the distance between Boston, Massachusetts and Philadelphia, Pennsylvania). And, while the use of this technology for the past ten years has been limited to discrete portions of the northern Pacific Ocean, Defendants' Final Rule would authorize the Navy

<sup>1</sup> "Defendants," as used herein, refers collectively to NMFS, the Administrator of the National Oceanic and Atmospheric Administration ("NOAA"), the Acting Assistant Administrator for Fisheries, the Acting Secretary of Commerce, the Navy, the Secretary of the Navy, and the Chief of Naval Operations. "NMFS Defendants" refers collectively to NMFS, the Administrator of NOAA, the Acting Assistant Administrator for Fisheries, and the Acting Secretary of Commerce; and "Navy Defendants" refers collectively to the Navy, the Secretary of the Navy, and the Chief of Naval Operations.

1 to introduce use of the LFA system to all of the world's oceans other than Antarctica's Southern  
2 Ocean and the Arctic Ocean.

3 3. Despite the fact that a single LFA source is capable of flooding thousands of square  
4 miles of ocean with intense levels of sound, Defendants approved LFA for worldwide training,  
5 testing, and routine military operations – without sufficient mitigation – for the next five years.  
6 The approval comes in the face of evidence that LFA creates a risk of widespread injury and  
7 disturbance to countless marine species and their habitat, through impacts that range from  
8 significant disruptions in critical behaviors like breeding, nursing, and foraging, to physical effects  
9 such as hearing loss, stranding, and death, and despite acknowledgement by NOAA that identifying  
10 and protecting important marine mammal habitat is the most effective measure available to  
11 mitigate the effects of LFA and other high-intensity noise on marine mammals.

12 4. Nonetheless, Defendants, in analyzing the environmental effects of the Final Rule,  
13 refused to include alternatives that would restrict the Navy's training to areas with reduced risk of  
14 harm to marine life and refused to consider an adequate coastal exclusion zone to protect near-  
15 shore and continental shelf areas, the biological importance of which is undisputable and  
16 previously has been recognized, in related litigation, by the Court. Instead, Defendants adopted  
17 mitigation measures that are grossly disproportionate to the scope of the Navy's request – setting  
18 aside a mere twenty-two "Offshore Biologically Important Areas" that are literally a drop in the  
19 bucket when compared to the more than 98 million square miles of ocean (50% of the surface of  
20 the planet) open to deployment. Defendants' apparent conclusion that there are fewer than two  
21 dozen small areas throughout the world's oceans that warrant protection from this technology is not  
22 based on any reasoned approach and is arbitrary and capricious.

23 5. Defendants' approval and implementation of the Final Rule are not based on the best  
24 available science. For example, since the Navy's original environmental impact statement with  
25 respect to the deployment of LFA was issued in 2001, the scientific record documenting impacts of  
26 high-intensity, low-frequency noise on marine mammals has grown substantially, showing  
27 disruptions in foraging and other vital activity at lower levels than Defendants estimate for LFA.  
28 Yet Defendants continue to predicate their impact analysis on a fifteen-year-old Navy study that

1 did not assess impacts on species now known to be highly sensitive, such as beaked whales, and  
2 was not designed to detect the range of significant impacts documented in more recent scientific  
3 studies. In addition, by refusing to protect habitat for species other than baleen whales, Defendants  
4 ignore scientific evidence showing that low-frequency sounds can harm other marine mammal  
5 species.

6 6. Despite the documented adverse effects of high-intensity, low-frequency noise on  
7 marine mammals, the Final Rule fails to include adequate mitigation measures or sufficient  
8 monitoring of the effects of LFA on marine mammals. Indeed, the Navy's long-term monitoring  
9 program adopts a system the efficacy of which remains unproven and the coverage of which  
10 includes only a small part of LFA's impact area. The monitoring system provides no basis for  
11 estimating the number of animals taken at the Navy's training sites, let alone assessing the degree  
12 to which populations have been and will be impacted.

13 7. NMFS' issuance of the Final Rule, which authorizes practically worldwide  
14 deployment of LFA without adequate mitigation or monitoring, and the Navy's reliance on that  
15 Final Rule, violates the Marine Mammal Protection Act ("MMPA"), 16 U.S.C. §§1361-1421. By  
16 neglecting to use best available science, NMFS has failed to ensure that the Navy's activity will  
17 have no more than a negligible impact on marine mammals. It has also failed to prescribe  
18 measures achieving the "least practicable impact" on protected species and to set forth sufficient  
19 requirements for monitoring and reporting of impacts. In addition, NMFS illegally has attempted  
20 to defer its analysis of both site-specific impacts and mitigation measures downstream, to an annual  
21 closed-door process involving issuance of LOAs, in violation of the MMPA's express requirement  
22 for public notice and comment.

23 8. Defendants have also violated the National Environmental Policy Act ("NEPA"), 40  
24 U.S.C. §§4321-4370, by failing to identify and adequately consider all reasonably available  
25 alternatives, such as focusing training in areas where there would be reduced risk of harm to  
26 marine mammals; failing to identify and analyze all feasible mitigation measures; and failing  
27 adequately to analyze all reasonably foreseeable impacts, particularly given the significant new  
28 scientific information that has emerged in the past years. The Navy's own modeling indicates that



1 large numbers of marine mammals would be taken as a result of the Final Rule, and yet  
2 Defendants, in their SEIS, fail properly to account for the cumulative effects of their activities,  
3 particularly in areas exposed repeatedly to LFA over multiple years.

4 9. The NMFS Defendants' actions also violate the Endangered Species Act ("ESA"), 16  
5 U.S.C. §§1531-1544. Specifically, NMFS issued two Biological Opinions on August 13 and  
6 August 15, 2012, that erroneously and with no justifiable basis conclude that the Navy's LFA  
7 system is not likely to jeopardize the continued existence of any species or result in the destruction  
8 or adverse modification of designated critical habitat. Based on Navy's own estimates of the  
9 percentages of listed species that will be taken and the best available science on the impact of LFA  
10 operations on threatened and endangered marine mammals, fish, and sea turtles, NMFS's  
11 conclusions in the Biological Opinions are arbitrary and capricious.

12 10. Defendants' violations of law are all the more egregious given the fact that this is  
13 their third bite at the apple. Their two previous attempts at deployment and rule-making with  
14 respect to LFA were curtailed by injunctions and ultimately settlements approved by this Court. In  
15 both previous cases, the Court's opinions and orders confirmed that Defendants, in proposing to  
16 use LFA systems throughout the world's oceans, have an obligation to thoroughly assess  
17 alternatives and mitigation measures that would limit harm to marine mammals and other protected  
18 species.

19 11. In reviewing Defendants' first deployment of LFA, in 2003, this Court found it  
20 "undisputed that marine mammals, many of whom depend on sensitive hearing for essential  
21 activities like finding food and mates and avoiding predators, and some of whom are endangered  
22 species, will at a minimum be harassed by the extremely loud and far traveling LFA sonar."  
23 *Natural Resources Defense Council, Inc. v. Evans*, 279 F. Supp. 2d 1129, 1188 (N.D. Cal. 2003)  
24 (herein "*LFA I*"). The Court ruled in that case that Defendants had violated multiple provisions of  
25 the MMPA, NEPA, and the ESA in deciding to deploy the system and authorizing its impacts  
26 without sufficient mitigation. Complying with the Court's opinion and order on cross-motions for  
27 summary judgment, the parties negotiated a carefully tailored permanent injunction whereby the  
28 Navy could continue to operate LFA in a variety of ocean conditions while also taking necessary

1 and feasible steps to protect marine mammals and endangered species, particularly by restricting  
2 LFA's use in vulnerable habitat.

3 12. In reviewing Defendants' second round of environmental compliance and rule-  
4 making for LFA five years later, in 2008, this Court made the same findings about the technology's  
5 far-ranging impacts, expressing particular concern for endangered species, for vulnerable coastal  
6 habitat, and for "small, localized populations," noting that there was "little if any margin for error."  
7 *Natural Resources Defense Council, Inc. v. Gutierrez*, No. C-07-04771 EDL, 2008 WL 360852 at  
8 \*30 (N.D. Cal. Feb. 6, 2008) (herein "*LFA II*"). Again, in ruling on the plaintiffs' motion for a  
9 preliminary injunction, the Court ruled that plaintiffs had established a likelihood of success with  
10 respect to several of their claims that Defendants' decision to deploy and authorize LSA without  
11 adequate mitigation measures violated federal law. Following the Court's ruling in *LFA II* that a  
12 preliminary injunction was appropriate, the parties negotiated the terms of an injunction, which  
13 ultimately led to a stipulated settlement agreement approved by the Court that, again, satisfied the  
14 Navy's training needs while protecting additional vulnerable marine habitat.

15 13. Now, ten years after the first court case, NMFS has issued a new five-year rule under  
16 the MMPA authorizing the Navy's operation of LFA systems in approximately 70-75 percent of  
17 the world's oceans. The 2012 Final Rule, as well as the SEIS produced by the Navy and adopted  
18 by NMFS, purport to respond to the Court's 2003 and 2008 rulings. Yet the latest rule, the SEIS,  
19 and the Biological Opinions prepared by NMFS under the ESA continue to be legally deficient and  
20 fail to respond to concerns previously identified by the Court, most pointedly in their inadequate  
21 consideration of mitigation measures necessary and appropriate to protect marine life.

22 14. To remedy these violations of law, Plaintiffs seek: (1) a declaration that the United  
23 States, and each of its named defendant subdivisions and officials, are violating federal law in the  
24 respects set forth herein; and (2) a tailored injunction prohibiting the United States and its  
25 subdivisions, officials, agents, and contractors from proceeding with the five-year deployment as  
26 currently authorized by the Final Rule unless and until these violations are corrected, including by  
27 ensuring the adoption of adequate mitigation measures.

16. This Court has subject matter jurisdiction over the claims set forth in this Complaint pursuant to 28 U.S.C. §1331 (Federal Question Jurisdiction), 5 U.S.C. §702 (Administrative Procedure Act), and 28 U.S.C. §1361 (Mandamus). The relief sought is authorized by 28 U.S.C. §2201 (Declaratory Relief) and 28 U.S.C. §2202 (Injunctive Relief).

17. Venue is proper in this District pursuant to 28 U.S.C. §§1391(b) and (e) as this civil action is brought against agencies of the United States and officers and employees of the United States acting in their official capacities and under the color of legal authority, and at least one Plaintiff resides in the Northern District of California. No real property is involved in this action. Intradistrict assignment to the San Francisco-Oakland division of this Court is appropriate because some of the acts and omissions of which Plaintiffs complain herein will occur in the division.

18. An actual and substantial controversy presently exists between Plaintiffs and Defendants. Plaintiffs assert that Defendants are violating federal law. Plaintiffs have notified Defendants of these violations, but Defendants have not corrected them.

19. Plaintiffs have no plain, speedy, or adequate remedy in the ordinary course of law. Unless this Court grants the relief requested, Defendants' actions will result in irreparable harm to marine mammals, other species, and the marine environment generally, to the interests of Plaintiffs and their members, and to the public in violation of federal law and contrary to the public interest. No monetary damages or other legal remedy could adequately compensate Plaintiffs, their members, or the public for this harm.

20. Plaintiffs and their members are persons adversely affected and aggrieved by federal agency action and are entitled to judicial review of that action under the Administrative Procedure

1 Act ("APA"). As more fully alleged herein, the interests of Plaintiffs and their members are being  
2 directly and significantly harmed by the illegal actions of Defendants. The relief requested will  
3 fully redress those injuries.

4 **A. Plaintiffs**

5 21. Plaintiff Natural Resources Defense Council, Inc. ("NRDC") is a national  
6 environmental advocacy group organized as a not-for-profit membership corporation under the  
7 laws of the State of New York. It has offices in New York, Los Angeles, San Francisco,  
8 Washington, D.C., Chicago, and Beijing, China. NRDC currently has more than 363,000  
9 members throughout the United States, with more than 65,000 individual members in California.  
10 On behalf of its members, NRDC is dedicated to the preservation, protection, and defense of the  
11 environment, its wildlife, and natural resources.

12 22. Plaintiff The Humane Society of the United States ("the HSUS") is a national  
13 nonprofit organization headquartered in Washington, D.C. The HSUS is the nation's largest  
14 animal protection organization, with more than 11 million members and constituents. The HSUS is  
15 committed to the goals of protecting, conserving, and enhancing the nation's wildlife and fostering  
16 the humane treatment of all animals. In furtherance of these goals and objectives, the HSUS and  
17 its members have demonstrated a strong interest in the preservation, enhancement, and humane  
18 treatment of marine mammals as well as other marine species.

19 23. Plaintiff Cetacean Society International ("CSI") is a not-for-profit corporation  
20 organized under the laws of the State of Connecticut. Headquartered in Connecticut, it is currently  
21 represented in 21 countries and maintains an international membership that includes professionals  
22 from the scientific and conservation communities. CSI is dedicated to the benefit of whales,  
23 dolphins, porpoises, and the marine environment primarily through conservation, education, and  
24 research.

25 24. Plaintiff League for Coastal Protection ("LCP") is a not-for-profit public benefit  
26 corporation incorporated in California in 1982. It consists of a coalition of environmental  
27 organizations and individuals created to protect and support coastal resources. LCP and its  
28



1 members are committed, through advocacy and education, to the protection of the California's  
2 sensitive coastal resources and to the enforcement of the California Coastal Act.

3 25. Plaintiff Ocean Futures Society ("OFS") is a not-for-profit corporation organized  
4 under the laws of the State of California. On behalf of itself and its members, the mission of OFS  
5 is to explore our global ocean, inspiring and educating people throughout the world to act  
6 responsibly for its protection, documenting the critical connection between humanity and nature,  
7 and celebrating the ocean's vital importance to the survival of all life on our planet.

8 26. Plaintiff Jean-Michel Cousteau is an explorer, environmentalist, educator, and film-  
9 maker, residing in Santa Barbara, California. He is President of the Ocean Futures Society, a not-  
10 for-profit marine conservation and education organization. He has produced more than 70 films,  
11 and continues to produce environmentally oriented programs and television specials, public service  
12 announcements, multi-media programs for schools, web-based marine content, books, articles for  
13 magazines and newspaper columns, and public lectures. Jean-Michel Cousteau is suing in his  
14 official capacity as President of Ocean Futures Society.

15 27. Plaintiff Michael Stocker is a bioacoustician who has been engaged in issues  
16 concerning anthropogenic undersea noise since 1992, and who resides in Forest Knolls, California.  
17 He is the founder and Director of Ocean Conservation Research, a research-based, California non-  
18 profit organization focused on understanding the impacts of anthropogenic noise on marine life.  
19 He is the author of numerous publications regarding marine bioacoustics. Mr. Stocker is dedicated  
20 to improving understanding of marine bioacoustics in order to inform how we mitigate for our  
21 acoustical intrusions into the ocean. He has a professional and personal interest in observing,  
22 enjoying and studying marine mammals and their habitats.

23 28. Plaintiffs and Plaintiffs' members and constituents regularly use, enjoy, and benefit  
24 from the marine environment, including U.S. waters within the Northern District of California and  
25 beyond, and the presence of healthy marine animals within that environment for recreational,  
26 aesthetic, commercial, scientific, and environmental purposes, including whale-watching, scientific  
27 study, boat touring, underwater diving, deep-sea fishing, photography, and film-making. The  
28 ability of Plaintiffs and Plaintiffs' members to pursue these interests hinges not only on the well-

1 being of marine animals that live, migrate, feed, and breed in areas affected by the Navy's  
2 proposed activities, but also on the health of the marine ecosystem on which these animals depend.

3 29. To protect the interests of Plaintiffs and the public, NRDC and other plaintiffs  
4 submitted extensive comments to Defendants within the periods allowed by law with respect to the  
5 Final Rule and the SEIS, and expressed numerous, significant concerns about the proposed  
6 continued deployment of LFA. Because Defendants' Final Rule, annual LOAs, SEIS, and  
7 Biological Opinions are legally deficient – including because they repeat violations identified by  
8 the District Court in 2003 and 2008 and fail to include adequate mitigation measures – and because  
9 these documents authorize immediate deployment of LFA, the interests of Plaintiffs' members and  
10 the public have been, are being, and will be adversely affected by Defendants' violations of federal  
11 law, as described herein.

12 **B. Defendants**

13 30. Defendant Rebecca Blank is the Acting Secretary of the Department of Commerce,  
14 and the Department's highest-ranking official. The Secretary is responsible for ensuring the  
15 compliance of NMFS and NOAA with applicable federal laws, including NEPA, the MMPA, ESA,  
16 and the APA. Acting Secretary Blank is sued in her official capacity only.

17 31. Defendant National Marine Fisheries Service is an agency within the National  
18 Oceanic and Atmospheric Administration of the United States Department of Commerce. NMFS  
19 is the federal agency that issued the Final Rule, LOA, and Biological Opinions and, along with the  
20 Navy, adopted the SEIS challenged here. As a federal agency, NMFS is responsible for ensuring  
21 its compliance with NEPA, the MMPA, ESA, and the APA.

22 32. Defendant Sam Rauch is the Acting Assistant Administrator for Fisheries, the  
23 highest-ranking official within NMFS. The Assistant Administrator is responsible for ensuring  
24 NMFS' compliance with applicable federal laws, including NEPA, the MMPA, ESA, and the APA.  
25 Acting Assistant Administrator Rauch is sued in his official capacity only.

26 33. Defendant Jane Lubchenco is the Administrator of NOAA, the agency that  
27 encompasses NMFS and is itself a sub-division of the Department of Commerce. The  
28

1 Administrator of NOAA is responsible for ensuring compliance with NEPA, the MMPA, ESA, and  
2 the APA. Administrator Lubchenco is sued in her official capacity only.

3 34. Defendant Department of the Navy is an agency within the United States Department  
4 of Defense. The Navy is the federal agency that seeks to conduct the LFA sonar activities that are  
5 the focus of this action. As a federal agency, the Navy is responsible for ensuring its compliance  
6 with NEPA, the MMPA, ESA, and the APA.

7 35. Defendant Ray Mabus is Secretary of the Navy, the highest-ranking official within  
8 the United States Department of the Navy. The Secretary is responsible for the LFA sonar  
9 activities at issue in this Complaint and for ensuring the Navy's compliance with applicable federal  
10 laws, including NEPA, the MMPA, ESA, and the APA. Secretary Mabus is sued in his official  
11 capacity only.

12 36. Defendant Admiral Jonathan Greenert is Chief of Naval Operations, an officer of the  
13 Navy. The Chief of Naval Operations is responsible for the LFA system's compliance with NEPA  
14 and other applicable federal laws. Chief Greenert is sued in his official capacity only.

## 15 STATUTORY BACKGROUND

### 16 A. The Marine Mammal Protection Act

17 37. The MMPA was enacted in 1972 pursuant to congressional findings that "certain  
18 species and population stocks of marine mammals are, or may be, in danger of extinction or  
19 depletion as a result of man's activities," and, further, that "[t]here is inadequate knowledge of the  
20 ecology and population dynamics of such marine mammals . . . ." 16 U.S.C. §1361(l), (3). In  
21 order to protect against further depletion and extinction, the MMPA established a "moratorium on  
22 the taking . . . of marine mammals . . . ." *Id.* §1371(a).

23 38. Under the MMPA, "the term 'take' means to harass, hunt, capture, or kill, or attempt  
24 to harass, hunt, capture, or kill any marine mammal." *Id.* §1362(13). "Harass" is further defined to  
25 include acts of "torment" or "annoyance" that have the potential to injure a marine mammal or  
26 marine mammal stock in the wild or have the potential to "disturb" them "by causing disruption of  
27 behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding,  
28 or sheltering." *Id.* §1362(18).

1           39. All takings of marine mammals (except for certain specified activities such as  
2 subsistence hunting or commercial fishing) are prohibited under the MMPA unless first authorized  
3 by the Secretary of Commerce through the issuance of either an incidental take permit or an  
4 “incidental harassment” authorization. 16 U.S.C. §1371(a); 50 C.F.R. §216.107. The MMPA and  
5 its accompanying regulations set forth standards and procedures that must be satisfied before either  
6 an incidental take permit or incidental harassment authorization may issue. 16 U.S.C. §1371(a); 50  
7 C.F.R. §216.107.

8           40. Section 101 of the MMPA allows the Secretary of Commerce, through his or her  
9 agencies, including NOAA and NMFS, to grant a take permit only on the condition that, *inter alia*:  
10 (i) the Secretary first provides adequate notice in the Federal Register and an opportunity for public  
11 comment; (ii) the takings the permit authorizes have no more than a “negligible impact” on marine  
12 mammal species and stocks; (iii) the permit provides for the monitoring and reporting of such  
13 takings; and (iv) the permit prescribes methods and means of effecting the “least practicable  
14 impact” on species and stock and their habitat. 16 U.S.C. §1371(a)(5)(A)(i), (ii). Each of these  
15 requirements is mandatory and cannot be avoided by claims of insufficient information. Under  
16 NMFS’ regulations, the issuance of an LOA by NMFS is a necessary precondition to taking action  
17 under the take permit. LOAs are issued to the applicant and outline the permissible methods and  
18 the specified geographical region of taking; the means that must be followed to affect the least  
19 practicable adverse impact on the species or stock; and the applicant’s required monitoring and  
20 reporting.

21           41. In another protective measure designed to ensure the scientific soundness of decisions  
22 under the MMPA, Congress established the United States Marine Mammal Commission and  
23 charged it with making recommendations on specific matters before the Secretary of Commerce.  
24 The MMPA requires that any deviation from such recommendations must be explained in detail, a  
25 level of deference unprecedented for an advisory panel at the time the MMPA was adopted.  
26 16 U.S.C. § 1402(d).

**B. The National Environmental Policy Act**

42. NEPA is “our basic national charter for protection of the environment.” 40 C.F.R. §1500.1(a). It was enacted in 1970 to establish procedures to ensure that, before irreversibly committing resources to a project or program, federal agencies “encourage productive and enjoyable harmony between man and his environment,” “promote efforts which will prevent or eliminate damage to the environment,” and “enrich the understanding of the ecological systems and natural resources important to the Nation.” 42 U.S.C. §4321.

43. To further this goal, Section 102(2)(c) of NEPA requires federal agencies to prepare, consider, and approve an adequate environmental impact statement (“EIS”) for any “major Federal action[] significantly affecting the quality of the human environment.” 42 U.S.C. §4332(2)(C). To assure the transparency and thoroughness of these deliberations, agencies also must “to the fullest extent possible . . . [e]ncourage and facilitate public involvement” in decision-making. 40 C.F.R. §1500.2(d).

44. In order to satisfy NEPA, an EIS must include a “full and fair discussion of significant environmental impacts.” 40 C.F.R. §1502.1. This discussion may not consider a proposed action in isolation, but rather must consider cumulative impacts, including the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” *Id.* §1508.7.

45. An adequate EIS must consider both direct and indirect environmental impacts of the proposed action. 40 C.F.R. §1508.8. Direct effects are caused by the action and occur at the same time and place. *Id.* §1508.8(a). Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. *See id.* §1508.8(b). Both include “effects on natural resources and on the components, structures, and functioning of affected ecosystems,” as well as “aesthetic, historic, cultural, economic, social, or health [effects].” *Id.* The EIS must also consider the cumulative effects of the activity together with other reasonably foreseeable future actions. 40 C.F.R. §1508.7.

46. An agency must make every attempt to obtain and disclose data necessary to its analysis. Where information relevant to a reasonably foreseeable significant adverse impact is



essential to a reasoned choice among alternatives, and may be obtained at a less than exorbitant cost, the agency must include that information in its EIS. 40 C.F.R. §1502.22(a). Where the costs of obtaining missing data are exorbitant or the means to obtain it are unknown, the agency must (i) identify the missing information, (ii) assess its relevance in evaluating reasonably foreseeable significant adverse impacts, (iii) summarize existing credible scientific evidence on the subject, and (iv) demonstrate that the agency's evaluation of such impacts is "based upon theoretical approaches or research methods generally accepted in the scientific community."

*Id.* §1502.22(b)(1). Throughout an EIS, the agency is required to "insure the professional integrity, including scientific integrity," of its discussions and analyses. *Id.* §1502.24.

47. An EIS must also "inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. §1502.1. This requirement represents "the heart of the environmental impact statement." *Id.* §1502.14. The agency must therefore "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." *Id.* §1502.14(a). The agency must also consider and analyze "mitigation measures not already included in the proposed action or alternatives." *Id.* §§1502.14(f), 1508.20.

48. If, after the completion of an EIS, the agency becomes aware of "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts," it must prepare a supplemental EIS. 40 C.F.R. §1502.9(c)(1)(ii). Except for scoping, the process by which the scope of an EIS is initially defined, this supplemental statement must be prepared in the same fashion as the original EIS. *See id.* §1502.9(a).

### **C. The Endangered Species Act**

49. Congress passed the ESA in 1973 in response to growing concern over the extinction of fish, wildlife, and plants stemming from human activities "untempered by adequate concern and conservation." 16 U.S.C. §1531(a)(1). Recognizing the aesthetic, ecological, educational, historical, recreational, and scientific value of these species, Congress enacted the ESA with the express purpose of "provid[ing] a means whereby the ecosystems upon which endangered species

1 and threatened species depend may be conserved, [and] . . . provid[ing] a program for the  
2 conservation of such endangered species and threatened species.” *Id.* §1531(b).

3 50. The U.S. Fish and Wildlife Service (“FWS”) and NMFS share responsibility for  
4 administering the ESA. 50 C.F.R. §402.01(b).

5 51. The ESA prohibits any person from “taking” species listed as endangered, and  
6 empowers FWS and NMFS to promulgate regulations prohibiting the taking of any species listed  
7 as threatened. 16 U.S.C. §§1533, 1538(a)(1)(A)-(B), (G). “Take” is defined by the ESA as “to  
8 harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in  
9 any such conduct.” *Id.* §1532(19).

10 52. Section 7 of the ESA requires each federal agency, in consultation with NMFS or  
11 FWS, to “insure that any action authorized, funded, or carried out by [a federal] agency. . . is not  
12 likely to jeopardize the continued existence of any endangered species or threatened species or  
13 result in the destruction or adverse modification of habitat of such species which is determined by  
14 the Secretary [of the Interior or of Commerce] . . . to be critical.” 16 U.S.C. §1536(a)(2).

15 53. Consultation pursuant to Section 7 can take place in two forms: informal consultation  
16 and formal consultation. Formal consultation is defined as “a process between [NMFS and/or  
17 FWS] and the Federal agency that commences with the Federal agency’s written request for  
18 consultation under section 7(a)(2) of the Act and concludes with the . . . issuance of the biological  
19 opinion under section 7(b)(3).” 50 C.F.R. §§402.02, 402.14; *see also* 16 U.S.C. §1536(b)(3).  
20 Following formal consultation, NMFS and/or FWS issues a “biological opinion” indicating  
21 “whether or not the Federal action is likely to jeopardize the continued existence of listed species  
22 or result in the destruction or adverse modification of critical habitat.” 50 C.F.R. §402.02.

23 54. Additionally, in those cases where a biological opinion includes a taking of marine  
24 mammals authorized under the MMPA, NMFS must provide a statement concerning any incidental  
25 take that: (i) specifies the “amount or extent” of such take on the species; (ii) specifies those  
26 reasonable and prudent measures necessary to minimize such impact; (iii) specifies those measures  
27 necessary to comply with section 101(a)(5) of the MMPA; (iv) sets forth terms and conditions that  
28 must be complied with by the federal agency to implement those reasonable and prudent measures

1 and conditions; and (v) specifies the procedures to be used to handle or dispose of any individuals  
2 of a species actually taken. 50 C.F.R. §402.14(i).

### 3 **FACTUAL BACKGROUND**

#### 4 **A. Overview of the LFA System**

5 55. SURTASS LFA is an active sonar system that identifies and locates enemy vessels by  
6 bombarding the ocean with high-intensity sound waves. Active sonar is the transmission of sound  
7 energy for the purpose of sensing the environment by interpreting features of received signals. It  
8 detects objects by creating a sound pulse or ping that moves through the water and reflects off  
9 potential targets, returning in the form of an echo. The SURTASS LFA sonar system is a long-  
10 range, low-frequency active sonar – operating between 100 and 500 Hertz. Mid-frequency active  
11 sonar, also used by the Navy to detect potential targets, operates between 1 kilohertz to 10  
12 kilohertz.

13 56. The active component of LFA is an array of up to eighteen loudspeakers lowered  
14 several hundred feet from a ship's hull into the ocean. The speakers are synchronized through  
15 electrical lines running the length of a central cable; sounding in tandem, they combine a few  
16 hundred meters from the source, creating zones of focalized sound in patterns that extend hundreds  
17 of miles in all directions. In coastal and near-coastal waters, virtually the entire water column is  
18 ensonified. According to the Navy, each of the eighteen speakers has a maximum output of  
19 215 decibels. For purposes of calculating the intensity of the signal created by a LFA system  
20 beyond a few hundred meters (where the vast majority of environmental impacts are expected to  
21 occur), the Navy has treated the speakers as though they constitute one very large source  
22 generating as much as 240 decibels of sound.

23 57. Throughout the next proposed five-year period of LFA deployment, the Navy plans  
24 to utilize up to four LFA systems: a significant increase over the last five-year period.

25 58. The low-frequency sound waves produced by SURTASS LFA travel very efficiently  
26 in seawater and, as a result, the system has an extraordinary geographic reach and affects a  
27 diversity of habitats. For example, sound waves generated during one test of the LFA system were  
28 calculated by the Navy to reach approximately 140 decibels – an intensity more than 100 times

greater than the level known to disturb gray whales – more than 300 miles from the source. During LFA tests off the coast of California, its signals were clearly audible at sites across the entire North Pacific. According to NMFS, sound levels of 165 decibels – at which level Defendants predict that 50 percent of marine mammals would undergo significant change in a biologically important behavior – can occur more than 35 miles from a LFA vessel.

**B. Environmental Impacts of Active Sonar**

59. Sound is a mechanical vibration that causes changes in pressure in a medium such as water or air. High-intensity sounds have been recognized to pose a unique danger to marine mammals and other aquatic species, in part because of the important role that acoustics play in marine ecology. LFA poses a particular threat to the marine environment because of the extraordinary distance that low-frequency sound can travel underwater. According to official comments prepared by the U.S. Marine Mammal Commission in 1996, “[i]f the LFA sonar system is made available for world-wide employment as proposed, all species and populations of marine mammals could possibly be affected.”

60. Scientists agree, and the publicly available scientific literature reflects, that intense sound generated by active sonar can induce a range of adverse effects in whales, dolphins, and other marine wildlife, including but not limited to:

- mortality or serious injury caused by hemorrhaging of tissues in lungs, air cavities, or other structures of the body, which may lead animals to strand or to die at sea;
- joint pain, disorientation, visual and auditory dysfunction, and other central nervous system deficits, which likewise may result in serious injury or death;
- stranding in shallow water or beaching caused by these or other effects;
- temporary or permanent loss of hearing, which impairs an animal’s ability to communicate, avoid predators, detect and capture prey, and engage in other behaviors essential to its survival;
- avoidance behavior, which can lead to abandonment of habitat or migratory pathways;

- disruption of biologically essential behaviors such as mating, feeding, nursing, or migration, or loss of efficiency in conducting those behaviors;
- aggressive behavior, which can result in injury;
- chronic stress, which compromises breeding and may leave animals vulnerable to disease, parasitism, and other environmental harms;
- habituation, causing animals to remain near damaging levels of sound, or sensitization, exacerbating other behavioral effects;
- masking of biologically meaningful sounds, such as the call of predators or potential mates, which occur at the same frequency; and
- declines in the availability and viability of prey species, such as fish and shrimp.

61. While, to date, investigation into whale mortalities has focused primarily on mid-frequency sonar, the available evidence suggests that low-frequency sources may have effects similar to those of mid-frequency sonar. For example, at least one beaked whale stranding event has been associated with the use of airguns, a source whose energy is predominantly concentrated in the low frequencies, and another documented stranding event is associated with an experimental naval sonar system that produced both low- and mid-frequency sounds. Further, two published experiments reported strong behavioral responses in beaked whales exposed to relatively low levels of shipping noise, another source whose energy is predominantly low-frequency. Considering this evidence, the published literature explicitly recognizes the potential for low-frequency sources to produce strandings, injuries, and mortalities of beaked whales.

62. Since the 2001 publication of the Navy's first EIS with respect to LFA deployment, a consensus has developed within the scientific community associating the use of military active sonar with strandings and mortalities of beaked whales and other marine mammals. That consensus is reflected in the publication of numerous papers in peer-reviewed journals, in reports by inter-governmental bodies such as the International Whaling Commission's ("IWC") Scientific Committee, and in evidence compiled from a growing number of marine mammal mortalities and significant behavioral responses (*e.g.*, silencing and habitat abandonment) associated with sonar. Strandings or pre-stranding behavioral responses associated with the use of active sonar have



1 occurred in Greece, the Bahamas, the Canary Islands, Virgin Islands, Spain, Madeira, Washington,  
2 Hawaii, North Carolina, the Ionian Sea, and other areas around the world. On several occasions,  
3 bodies of marine mammals have been recovered in time to document evidence of internal trauma  
4 that reflects symptoms associated with the intense sound generated by active sonar.

5 63. In 2004, the IWC Scientific Commission – comprising more than 100 leading whale  
6 biologists from around the world – reported that the accumulated evidence associating sonar with  
7 beaked whale strandings was “very convincing and appears overwhelming.” A group of scientists  
8 hired by the Navy to examine the impacts of active sonar on cetaceans came to the same  
9 conclusion in 2004, writing in a report to the Navy that “the evidence of sonar causation is, in our  
10 opinion, completely convincing and . . . there is [a] serious issue of how best to avoid/minimize  
11 future beaching events.”

12 64. For more than 25 years, naval exercises and other activities using high-intensity  
13 sound have caused or been associated with multiple mortality events of whales and other marine  
14 mammals. For example, in 1996, twelve Cuvier’s beaked whales stranded along 35 kilometers on  
15 the west coast of Greece. The strandings were correlated, by an analysis published in *Nature*, with  
16 the test of a low- and mid-frequency active sonar system operated by NATO. A subsequent NATO  
17 investigation found the strandings to be closely timed with the movements of the sonar vessel, and  
18 ruled out all other physical environmental factors as a cause.

19 65. Reported incidents of strandings and fatalities associated with Navy sonar under-  
20 represents the scale of the problem. For example, many whales may be affected by sonar far from  
21 shore and yet remain undiscovered, as most dead whales sink. NMFS recognized this point in its  
22 2011 stock assessment for Pacific populations of beaked whales, stating that “unknown levels of  
23 injuries and mortality of mesoplodont beaked whales may occur as a result of anthropogenic noise,  
24 such as military sonars (U.S. Dept. of Commerce and Secretary of the Navy 2001) or other  
25 commercial and scientific activities involving the use of air guns. Such injuries or mortality would  
26 rarely be documented, due to the remote nature of many of these activities and the low probability  
27 that an injured or dead beaked whale would strand.”  
28

1           66. The record developed since 2001 indicates that debilitating, severe, and potentially  
2 lethal injuries are occurring in whales exposed to sonar at sea, only some of which may then strand.  
3 As first reported in the journal *Nature*, animals that came ashore during sonar exercises off the  
4 Canary Islands in September 2002, had developed large emboli in their organ tissue and suffered  
5 from symptoms resembling those of severe decompression sickness, or “the bends.” Numerous  
6 studies, including investigations of other stranding events, laboratory experiments with marine  
7 mammal tissue, and studies of beaked whale dive physiology, have confirmed this finding.

8           67. Studies from a variety of regions, including the Mediterranean, the northwest  
9 Atlantic, and the Hawaiian Islands, now indicate that some marine mammal populations are highly  
10 structured and may be small, isolated, and genetically discrete. Such populations would be highly  
11 vulnerable to population-level effects from mass strandings or mortalities.

12           68. Mortalities and strandings represent only some of the LFA system’s probable  
13 impacts. Marine mammals depend on sound to navigate, find food, locate mates, avoid predators,  
14 and communicate with each other; flooding their habitat with anthropogenic noise interferes with  
15 these and other functions and can reduce the fitness of animals. Since Defendants’ 2007 SEIS  
16 regarding use of LFA, the scientific record on the behavioral impacts of ocean noise has expanded  
17 significantly.

18           69. Research has provided further evidence of habitat displacement, cessations and other  
19 changes in vocalization patterns, disruptions in foraging activity, and other impacts from a variety  
20 of low-frequency (and other) anthropogenic sources, including shipping noise, boat traffic, low-  
21 frequency remote sensing devices, and airgun arrays. To cite only a few examples, two studies,  
22 including a controlled exposure experiment sponsored and partly conducted by the Navy,  
23 demonstrated that vessel noise affects beaked whales and is likely to disrupt their foraging at  
24 moderate levels of predominantly low-frequency acoustic exposure. Another investigation  
25 documented suppression in humpback whale vocalization during operations of an Ocean Acoustic  
26 Waveguard Remote Sensing system, a powerful low-frequency sensor, at distances of 200 km from  
27 the source. And several experiments involving airgun noise (another predominantly low frequency  
28 source) have shown habitat displacement, foraging disruptions, and other impacts in a variety of

1 marine mammal species at relatively low exposure levels. The above studies, and others, indicate  
2 the inadequacy and limitations of the Navy's fifteen-year-old Scientific Research Program – which  
3 formed the basis of the agencies' behavioral impact analysis for the LFA system – both for  
4 assessing impacts on highly sensitive species such as beaked whales and for detecting subtle yet  
5 consequential disruptions in foraging and other vital marine mammal activity.

6 70. Marine mammals are not the only species affected by undersea noise. Impacts on  
7 fish are of increasing concern due to several recent studies demonstrating hearing loss and  
8 widespread behavioral disruption in commercial species of fish and reports, both experimental and  
9 anecdotal, of catch rates falling dramatically in the vicinity of intense low- and mid-frequency  
10 noise sources. Additionally, sea turtles, most of which are considered threatened or endangered  
11 under federal law, have been shown to engage in escape behavior and to experience heightened  
12 stress in response to noise. Thus, it is clear that intense sources of noise are capable of affecting a  
13 wide class of ocean life.

#### 14 C. Procedural History

##### 15 i. LFA I

16 71. Although the Navy was aware of its obligations under NEPA as early as 1988, and  
17 under the MMPA no later than 1990, it deployed LFA sonar in more than 20 separate tests or  
18 training exercises in the late 1980s and 1990s without preparing environmental assessments or  
19 obtaining permits. It was not until 1996, after the LFA project came under public pressure from  
20 the environmental and scientific communities, that the Navy agreed to prepare an EIS under  
21 NEPA, apply for a small take authorization under the MMPA, and consult with NMFS pursuant to  
22 the ESA regarding the LFA program.

23 72. In 1999, the Navy filed an application with NMFS for an incidental take permit  
24 pursuant to Section 101(a)(5) of the MMPA, requesting authorization to “take” (*i.e.*, kill, injure,  
25 harass, and/or disturb) marine mammals on a worldwide basis, incidental to deployment of the  
26 Navy's LFA system during training, testing, and routine military operations over a five-year  
27 period. Two years later, NMFS published a proposed rule authorizing the “incidental” take  
28

1 requested by the Navy. 66 Fed. Reg. 15375 (Mar. 19, 2001). The Navy's proposal, and NMFS'  
2 willingness to abide it, aroused an extraordinary degree of public concern given the high  
3 percentages of predicted takes, the breadth of the authorization, and the lack of adequate  
4 mitigation. In addition to the comments submitted by NRDC and other future plaintiffs, NMFS  
5 received more than 10,000 comments on the proposed rule, including comments from scientists,  
6 Members of Congress and other elected representatives, and thousands of private citizens and  
7 organizations, all alerting the agencies to deficiencies in their plan to authorize the broad use of  
8 LFA. The Navy released its final EIS with respect to that proposed rule in January 2001.

9 73. On May 30, 2002, NMFS issued a Biological Opinion, concluding that the  
10 deployment of LFA would not jeopardize the continued existence of any species listed as  
11 endangered or threatened under ESA or result in the adverse modification of any listed species'  
12 designated critical habitat. Two months later, in July 2002, the Navy issued a Record of Decision,  
13 implementing the preferred alternative identified in its January 2001 final EIS, which allowed the  
14 deployment of LFA with very few geographic restrictions and little mitigation or monitoring. 67  
15 Fed. Reg. 48145, 48153 (July 23, 2002). Also in July 2002, NMFS issued a final rule authorizing  
16 the Navy's use of LFA sonar, and adopting in its entirety the findings of the Navy's EIS. 67 Fed.  
17 Reg. 46712, 46775 (July 16, 2002).

18 74. In 2002, in light of the legal deficiencies in the Navy's January 2001 EIS and NMFS'  
19 rule authorizing the Navy's proposed plan of LFA deployment, NRDC, together with plaintiffs  
20 HSUS, LCP, CSI, OFS and Jean-Michel Cousteau, filed suit in this Court, alleging multiple  
21 violations of NEPA, ESA, and the MMPA. The plaintiffs alleged, *inter alia*, that NMFS violated  
22 the MMPA by issuing a small take authorization that did not meet the statute's requirements; that  
23 NMFS and the Navy violated NEPA by finalizing an EIS that failed to analyze adequately the  
24 environmental impacts of LFA; and that NMFS and the Navy violated ESA by ignoring the best  
25 available science regarding the impacts of LFA on listed species and by issuing inadequate (or no)  
26 incidental take statements. The plaintiffs also moved for a preliminary injunction.

27 75. On October 31, 2002, the Court granted a preliminary injunction, ordering the parties  
28 to meet and confer on the precise terms of an injunction that would extend a coastal buffer zone

1 and would identify additional biologically important areas in which the Navy would not use LFA.  
 2 Ten months later, on August 26, 2003, the Court ruled again in favor of NRDC and the other  
 3 plaintiffs on summary judgment, finding that defendants had violated multiple provisions of  
 4 NEPA, the MMPA, and ESA. *See Natural Resources Defense Council, Inc., et al. v. Evans*, 279  
 5 F.Supp.2d 1129 (N.D. Cal. 2003). Among other things, the Court held that:

- 6 • NMFS violated the MMPA by issuing an incidental take authorization that failed to  
 7 require adequate mitigation measures and monitoring of impacts to marine mammals (*id.* at 1160-  
 8 64);
- 9 • NMFS and the Navy violated NEPA by failing to consider a full set of reasonable  
 10 alternatives in the EIS (*id.* at 1166);
- 11 • NMFS and the Navy violated NEPA by failing to take a hard look at the impacts to  
 12 fish species in their EIS, including by ignoring the only direct study of low-frequency sonar on fish  
 13 (*id.* at 1170-71);
- 14 • NMFS violated the ESA by failing to consider the “best available science,” and the  
 15 Navy violated ESA by withholding from NMFS the most relevant study on impacts to fish (*id.* at  
 16 1179-80); and
- 17 • NMFS violated the ESA by failing to specify the amount or extent of take for all  
 18 species for which take was authorized in the incidental take statement accompanying its Biological  
 19 Opinion for the first-year LOAs (*id.* at 1187-88).

20 76. In holding that NMFS’ 2002 rule failed to provide sufficient mitigation measures for  
 21 the Navy’s use of LFA, the Court specifically noted that “defendants acted arbitrarily and  
 22 capriciously in failing to (1) extend the coastal exclusion zone in all areas except for those few  
 23 coastal areas where close to shore training is necessary, (2) use aerial surveys or observational  
 24 vessels for LFA sonar missions operated close to shore, and (3) designate additional off-limit areas  
 25 or seasons and OBIAAs [Offshore Biologically Important Areas].” *Id.* at 1164. Indeed, the Court  
 26 found these measures necessary *not only* to satisfy the MMPA’s mitigation provision, but also to  
 27 ensure that impacts are negligible. *Id.* at 1159. In holding that defendants’ January 2001 EIS  
 28 failed to analyze all reasonable alternatives to its proposed action, the Court also found that the



1 Navy should have considered training in areas that present a lower risk of harm to the marine  
2 environment and should have considered extending its shutdown protocol to sea turtles and schools  
3 of fish. *Id.* at 1166.

4 77. Rather than impose a complete ban on peacetime use of LFA, the Court, in balancing  
5 the hardships, ordered a carefully tailored injunction that accommodated both the Navy's interest in  
6 continued training with LFA and the plaintiffs' interest in protecting global marine resources. In  
7 response, on October 8, 2003, the parties filed a joint stipulation (the "2003 Stipulation") that  
8 restricted the Navy's training to an area of the western Pacific Ocean, with a wide coastal exclusion  
9 zone of at least 30 nautical miles around coasts and islands (60 nautical miles or more in some  
10 cases) and additional offshore exclusion zones in which LFA would not be used for the protection  
11 of important habitat. On October 14, 2003, the Court issued an Order incorporating the terms of  
12 the 2003 Stipulation.

13 78. In 2004, the Court amended its judgment in *LFA I* to reflect recent amendments to the  
14 MMPA. *NRDC v. Evans*, No. C-02-03805, Order Granting Defendants' Rule 60(b) Motion at 2-3  
15 (N.D. Cal. Dec. 1, 2004). In doing so, however, it did not vacate or amend any portion of its  
16 original Opinion. *Id.*

17 79. On December 19, 2003, Defendants filed an appeal with the Ninth Circuit Court of  
18 Appeals, challenging the Court's ruling, under the ESA, that NMFS had illegally failed to estimate  
19 takes of listed species in the Incidental Take Statement accompanying its five-year permit. On July  
20 24, 2006, the Ninth Circuit dismissed Defendants' appeal for lack of standing.

21 80. The rule that was the subject of *LFA I* expired on August 15, 2007, together with the  
22 parties' 2003 Stipulation and the Court order incorporating that stipulation.

23 **ii. LFA II**

24 81. In May 2006, the Navy submitted an application to NMFS under the MMPA, again  
25 requesting authorization for the take of marine mammals during another five-year period during  
26 which it would deploy LFA. The Navy also initiated formal consultation under Section 7 of the  
27 ESA.  
28

1           82. The Navy's request for authorization in 2006 doubled the number of proposed LFA  
2 systems and the number of authorized transmission hours. The Navy sought to conduct these  
3 transmissions in virtually the same geographic areas in which the 2002 rule had authorized it to use  
4 LFA, prior to the injunction and settlement.

5           83. In November 2005, the Navy issued a draft SEIS for public comment. Although  
6 NRDC and other organizations provided extensive comments on the draft SEIS explaining its  
7 deficiencies, particularly with respect to its alternatives and mitigation analysis and the significant  
8 new scientific evidence regarding the effects of high-intensity noise on marine mammals, the Navy  
9 issued a final SEIS on May 4, 2007, leaving its analysis and its alternatives and identified  
10 mitigation measures substantially unchanged.

11           84. According to the Navy, the SEIS addressed concerns of the Court "in its 26 August  
12 2003 Opinion and Order in relation to compliance with the National Environmental Policy Act  
13 (NEPA), Endangered Species Act (ESA), and Marine Mammal Protection Act (MMPA)." SEIS at  
14 P-1. Yet, in spite of the Court's specific concerns over the lack of adequate mitigation measures in  
15 the original EIS and take regulation, both the draft and final SEIS insufficiently considered and  
16 rejected every potential mitigation measure identified by the Court. The Navy, in its 2005 SEIS,  
17 declined to restrict the LFA system's use in offshore areas rich in marine life, extend the Navy's  
18 coastal exclusion zones, employ shut-down procedures for fish, or use additional monitoring  
19 methods for missions close to shore. The Navy's SEIS also failed to take account of significant  
20 scientific evidence regarding the effects of high-intensity noise on marine mammals.

21           85. In response to the Navy's request for a rule authorizing the use of LFA for another  
22 five-year period, NMFS issued a proposed rule under the MMPA in June 2007, and issued a  
23 substantially unchanged final rule in August 2007. The 2007 rule, like the 2002 rule, accepted  
24 wholesale the Navy's EIS analysis and its proposed mitigation and monitoring. A supporting  
25 Biological Opinion was issued in August 2007.

26           86. Despite considerable new information associating injury and mortality of marine  
27 mammals with intense sources of undersea noise, the 2007 rule authorized the annual taking of as  
28 much as 12 percent of any marine mammal species or stock. The 2007 rule also failed to adopt or

1 shortchanged each of the mitigation measures previously identified by the Court, and failed to  
2 consider additional mitigation measures that would mitigate LFA's impact on marine species. For  
3 example, notwithstanding the Court's recognition of the importance of shielding important habitat  
4 from exposure to LFA, NMFS authorized the addition of only six locations (including five  
5 National Marine Sanctuary) to its list of offshore exclusion areas. Similarly, NMFS failed to  
6 extend the Navy's coastal exclusion zone, instead disputing the premise that greater coastal  
7 exclusion zones would be beneficial to marine species. The 2007 rule also relied on the Navy's  
8 continued claim to have a monitoring system that could detect marine mammals in the immediate  
9 vicinity of the LFA vessel close to 100 percent of the time, despite the lack of any meaningful new  
10 data on the efficacy of the monitoring system.

11 87. Additionally, despite concerns expressed by NRDC, the Marine Mammal  
12 Commission and others, NMFS' 2007 rule again deferred much of the substantive analysis of  
13 impacts and mitigation to its annual LOA authorization process, a downstream, closed-door  
14 procedure that deprives the public of any opportunity for comment, contrary to the express  
15 provisions of the MMPA.

16 88. In light of the failure by the Navy and NMFS to correct the flaws in their analysis and  
17 authorization of LFA deployment, NRDC, together with plaintiffs HSUS, IFAW, CSI, LCP, OFS,  
18 and Jean-Michel Cousteau, filed suit in this Court on September 17, 2007, alleging multiple  
19 violations of NEPA, ESA, and the MMPA. The plaintiffs alleged, *inter alia*, that NMFS continued  
20 to violate the MMPA by issuing an incidental take authorization which did not meet that statute's  
21 requirements; that NMFS and the Navy violated NEPA by finalizing an EIS that failed to analyze  
22 adequately the environmental impacts of LFA; and that NMFS and the Navy violated ESA by  
23 ignoring the best available science on the impacts of LFA on listed species and by issuing  
24 inadequate (or no) incidental take statements.

25 89. On February 6, 2008, the Court ruled in favor of the plaintiffs on parts of their motion  
26 for preliminary injunction and ordered the parties to meet and confer on the precise terms of an  
27 injunction. *See Natural Resources Defense Council Inc., et al. v. Gutierrez*, 2008 WL 360852  
28 (N.D. Cal. Feb. 6, 2008). The Court found it likely plaintiffs would succeed in showing that

1 defendants had violated multiple provisions of NEPA and the MMPA and that the plaintiffs had  
 2 raised serious questions as to other claims. Among other things, the Court found that:

3 • The plaintiffs, with respect to their MMPA claim, showed a “likelihood of success  
 4 on the merits with regard to Defendants’ decision not to confine routine use of LFA sonar to areas  
 5 and seasons relatively devoid of biologically important marine mammal activity, while at the same  
 6 time only designate ten OBIAs, mainly in North America, and limit the coastal exclusion zone to  
 7 12 nm” (*id.* at \*11);

8 • The plaintiffs showed a likelihood of success on the merits of their NEPA claim  
 9 with regard to defendants’ failure adequately to address mitigation measures, particularly in light of  
 10 defendants’ failure to designate new OBIAs (*id.* at \*24);

11 • The plaintiffs raised serious questions on the merits of their MMPA claim “as to  
 12 whether Defendants acted arbitrarily and capriciously in not using a dual criteria that included the  
 13 distance from the shelf break as well as the coast, at least in those parts of coastal areas where  
 14 Defendants do not need to operate closer to shore” (*id.* at \*13), and as to whether that failure to  
 15 consider any form of a dual criteria, especially where the Navy had operated with such criteria for  
 16 five years, was a violation of NEPA’s requirement to consider all reasonable alternatives (*id.* at  
 17 \*23);

18 • The plaintiffs raised a serious question about whether NMFS’ authorized take would  
 19 have more than a “negligible impact” for “certain localized populations stocks” (*id.* at \*15-\*17);  
 20 and

21 • Defendants relied on a monitoring and mitigation scheme the “efficacy” of which  
 22 “is limited” (*id.* at \*9).

23 90. The parties conferred and entered into settlement discussions, reaching an agreement  
 24 on the entire case that was entered by the Court on August 12, 2008. The stipulated settlement  
 25 agreement restricted the Navy’s training to two defined areas of the Pacific Ocean – an area in the  
 26 western Pacific Ocean and an area north and south of the Hawaiian Islands, with important habitat  
 27 within those areas protected through year-round and seasonal closures, and a guarantee that  
 28

1 operations would not result in received sound pressure levels exceeding 180 dB within certain  
2 distances of coastlines and archipelagic chains.

3 91. The settlement agreement governed the Navy's use of LFA and ensured adequate  
4 mitigation for a period of five years, expiring on August 15, 2012.

5 **D. The Navy's New Proposal and NMFS' Final Rule**

6 92. In August 2011, the Navy submitted an application to NMFS under the MMPA,  
7 requesting that it issue a rule authorizing the taking of marine mammals during deployment of LFA  
8 for the five-year period of August 15, 2012 through August 15, 2017. The Navy initiated formal  
9 consultation under Section 7 of ESA on November 8, 2011.

10 93. The Navy's new request proposes the use of four operating LFA systems, increasing  
11 the number of deployments over the previous five years. The Navy seeks permission to use LFA in  
12 virtually the identical operations area that was previously proposed and ultimately rejected in *LFA I*  
13 and *LFA II*, and which in effect would open more than 70% of the world's oceans where LFA has  
14 not previously been used, to LFA exercises and the accompanying harms.

15 94. In August 2011, the Navy issued a draft SEIS for public comment. Despite this  
16 Court's previous critiques of the inadequacy of the Navy's alternatives and mitigation analysis and  
17 the importance of identifying sensitive and protected areas in which LFA would not be utilized, the  
18 draft SEIS again failed adequately to identify and analyze OBIA's and even to consider extending  
19 the Navy's coastal exclusion zones. Indeed, out of an area representing nearly three-quarters of the  
20 world's oceans, the draft SEIS identified less than two dozen areas that warrant protection from the  
21 use of LFA. These proposed OBIA's did not even include all of the OBIA's previously designated  
22 by the Defendants. The draft SEIS' identification of protected areas and zones in which marine  
23 animals should be free of LFA does not follow any reasoned or scientific approach.

24 95. Furthermore, despite significant developments in the rapidly growing scientific  
25 literature on the impacts of ocean noise, the draft SEIS did not meet its obligations under NEPA to  
26 consider and take account of this new evidence. For example, the draft SEIS relied almost  
27 exclusively on the Navy's fifteen-year old LFA Scientific Research Program ("SRP") to establish  
28 risk parameters for the LFA system, even though behavioral response and other studies that have



1 taken place in the intervening years indicate the limitations of the earlier Navy experiments and  
2 more recent science demonstrates higher risk from predominantly low-frequency sources at lower  
3 levels of exposure than previously presumed.

4 96. NRDC and other plaintiffs offered extensive comments on the draft SEIS, noting,  
5 *inter alia*, that Defendants had failed to identify and analyze sufficiently all reasonably available  
6 alternatives; failed to identify and analyze sufficiently all feasible mitigation measures; and failed  
7 adequately to analyze all reasonably foreseeable impacts, particularly given the significant new  
8 information on marine mammals that has emerged over the last decade. Despite these comments,  
9 the Navy issued its final SEIS in June 2012, leaving its alternatives and mitigation measures,  
10 including the designation of OBIAs and the failure to extend the coastal exclusion zones,  
11 effectively unchanged.

12 97. On January 6, 2012, NMFS issued a proposed Rule under the MMPA that, like the  
13 rules adopted in 2002 and 2007, incorporated the Navy's analysis and accepted the mitigation and  
14 monitoring measures set forth in the Navy's draft SEIS. NMFS published its Final Rule on August  
15 2012, authorizing the Navy to conduct LFA transmissions in 70-75 percent of the world's oceans  
16 during the next five-year period. Supporting Biological Opinions were also issued in August 2012.

17 98. The Final Rule is substantially unchanged from the rule proposed in January. In the  
18 Final Rule, NMFS again allows the annual taking of as much as 12 percent of any marine mammal  
19 species or population. NMFS again authorizes the use of LFA despite the lack of adequate  
20 mitigation measures, despite the designation of only 22 OBIAs, and despite the Navy's failure to  
21 extend the coastal exclusion zones. NMFS again relies on the Navy's claims of a close to 100  
22 percent detection rate of marine mammals in the immediate vicinity of the LFA vessel,  
23 notwithstanding the lack of any meaningful new data on the efficacy of its monitoring system.  
24 And NMFS again shunts further analysis of OBIAs and other substantive issues to a later, closed-  
25 door LOA process that the Court previously has found to be insufficient.

**FIRST CLAIM FOR RELIEF**

**Unlawful Issuance of Regulations in Violation of the  
Marine Mammal Protection act and Administrative Procedures Act**

99. Plaintiffs reallege and incorporate herein by reference each and every allegation and paragraph set forth previously.

100. Before issuing an incidental take authorization for LFA pursuant to Section 101(a)(5) of the MMPA and the APA, NMFS was required to (1) determine and ensure that the Navy's activity will have no more than a negligible impact on the species or population stocks at issue; (2) set forth sufficient methods to ensure the least practicable impact on each species or stock and its habitat, paying particular attention to areas of special significance; and (3) set forth sufficient requirements for the monitoring and reporting of impacts on marine mammals. *See* 16 U.S.C. §1371(a)(5)(D); 50 C.F.R. §216.107.

101. NMFS failed to comply with these mandatory requirements and to make the requisite findings in a manner supported by the record, and therefore the Final Rule, as well as the LOAs issued in reliance upon the Final Rule, are not legally adequate under the MMPA.

102. NMFS' plans to issue LOAs on an annual basis in future years based on the Final Rule and without providing opportunity for public comment further violate the MMPA and APA.

103. NMFS' issuance of an invalid Final Rule and LOAs and the Navy's reliance on that Final Rule and LOAs without providing adequate mitigation measures, including those previously ordered and approved by this Court, will result in the unlawful taking of a large and unknown number of marine mammals. Because the authorization is invalid, the Navy's incidental take of marine mammals is prohibited by the MMPA. *See* 16 U.S.C. §1372(a).

104. NMFS' issuance of regulations and first-year LOAs authorizing the take of marine mammals incidental to the operation of the LFA system, and the Navy's take of marine mammals pursuant to those regulations, constitute final agency action that adversely affects and aggrieves Plaintiffs.

105. Thus, under the APA, the NMFS Defendants' and the Navy Defendants' violations of the MMPA as alleged herein are "arbitrary and capricious," an "abuse of discretion," "not in

1 accordance with the law,” and “without observance of procedure required by law.” 5 U.S.C. §  
2 706(2)(A),(D).

### 3 **SECOND CLAIM FOR RELIEF**

#### 4 **Failure to Prepare an Adequate Environmental Impact Statement as Required under the 5 National Environmental Policy Act and Administrative Procedure Act**

6 106. Plaintiffs reallege and incorporate herein by reference each and every allegation  
7 and paragraph set forth previously.

8 107. Defendants constitute “agencies of the Federal Government” within the meaning of  
9 NEPA, and are bound by regulations adopted by the Council on Environmental Quality. 40 C.F.R.  
10 §1500.3.

11 108. The actions of Defendants set forth above are “major federal actions significantly  
12 affecting the quality of the human environment” within the meaning of NEPA. Grounds for a  
13 finding of “significance” include, but are not limited to: the intensity of the action; the ecological  
14 importance of the marine environment; the controversial nature of the LFA system; the uncertainty  
15 of LFA’s effects on the food web and other aspects of the marine ecosystem; the precedential  
16 nature of its world-wide scope of action; the cumulative impacts of the action considered together  
17 with other human activities generating noise in the marine environment; its adverse effects on  
18 endangered and threatened species or their critical habitat; and its violation of the MMPA and other  
19 Federal, State, and local environmental laws. 40 C.F.R. §1508.27.

20 109. Defendants have violated NEPA by preparing a SEIS that fails adequately to  
21 describe the substantial and wide-ranging impacts of LFA, both individually and cumulatively,  
22 upon all marine species potentially affected by operation of the system; to consider and analyze  
23 sufficiently all reasonable alternatives; and to identify and analyze sufficiently all feasible  
24 mitigation measures. By ignoring or failing adequately to consider LFA’s physical, behavioral,  
25 and ecological impacts on the marine environment, Defendants’ SEIS failed to satisfy their  
26 obligation under NEPA to provide “full and fair discussion of significant environmental impacts.”  
27 40 C.F.R. §1502.1.  
28

1           110. Defendants have failed adequately to consider the program's reasonably foreseeable  
2 environmental impacts by, for example, dismissing the potential for strandings and mortalities of  
3 beaked whales and other marine mammals, and by continuing to rely heavily on a fifteen-year-old  
4 study despite considerable new evidence showing impacts from predominantly low-frequency and  
5 other sources at lower levels of marine mammal exposure. 40 C.F.R. §1508.8. Defendants have  
6 failed to identify relevant gaps in the data they used to support their conclusions regarding  
7 reasonably foreseeable significant environmental impacts, failed to deal properly with the data gaps  
8 that they do identify, and failed to ensure the professional integrity, including the scientific  
9 integrity, of their analysis. 40 C.F.R. §§1502.22, 1502.24.

10           111. Defendants failed to consider and analyze all reasonable alternatives to the proposed  
11 action, such as focusing training with LFA in areas in which the training will have a reduced risk of  
12 adverse impact on marine animals, and to study, develop, and describe appropriate alternatives to  
13 their recommended courses of action in a proposal that involves unresolved conflicts concerning  
14 alternative uses of available resources. 42 U.S.C. §4332(2)(E); 40 C.F.R. §§1502.1, 1502.14.

15           112. Defendants failed to consider and analyze sufficiently all feasible mitigation,  
16 including, but not limited to, the mitigation measures identified by this Court in its 2003 and 2008  
17 Opinions and provided for in the Court's 2002, 2003, 2005, and 2008 Orders, such as the  
18 meaningful designation of Offshore Biologically Important Areas and other offshore exclusion  
19 zones to protect vulnerable species and habitat; the adoption of a coastal exclusion zone greater  
20 than twelve nautical miles from shore in which LFA would not be used; and the use of additional  
21 and effective means to detect the presence of marine mammals within areas of proposed LFA  
22 activity. 40 C.F.R. §§1502.14(f), 1508.20.

23           113. Navy Defendants' issuance of an SEIS and Record of Decision, NMFS Defendants'  
24 issuance of incidental take regulations, LOAs, Biological Opinions, and Incidental Take Statements  
25 without complying with NEPA and the regulations promulgated thereunder, and the Navy's use of  
26 the LFA system in reliance on those documents, constitute final agency action that adversely  
27 affects and aggrieves Plaintiffs.  
28

1           114. Thus, under the APA, Defendants' violation of NEPA and the regulations  
 2 promulgated thereunder in failing to prepare an adequate EIS or SEIS for the LFA system is  
 3 "arbitrary and capricious," an "abuse of discretion," "not in accordance with law," and "without  
 4 observance of procedure required by law." 5 U.S.C. §706(2)(A), (D).

5                                   **THIRD CLAIM FOR RELIEF**  
 6                                   **Failure to Prepare a Legally Adequate Biological Opinion**  
 7                                   **under the Endangered Species Act and Administrative Procedure Act**

8           115. Plaintiffs reallege and incorporate herein by reference each and every allegation  
 9 and paragraph set forth previously.

10           116. The challenged Navy exercises are actions "authorized, funded, or carried out" by a  
 11 federal agency within the meaning of 16 U.S.C. §1536(a)(2). Both NMFS Defendants and Navy  
 12 Defendants are therefore required to ensure that these exercises are "not likely to jeopardize the  
 13 continued existence of any endangered species or threatened species" or result in the "destruction  
 14 or adverse modification" of a listed species' designated critical habitat. 16 U.S.C. §1536(a)(2). In  
 15 fulfilling this requirement, the NMFS and Navy Defendants must engage in consultation over the  
 16 impacts of the proposed action, after which the NMFS Defendants – as the "expert" or "consulting"  
 17 agency – must issue a Biological Opinion. NMFS Defendants are required to "use the best  
 18 scientific and commercial data available" when preparing a Biological Opinion. *Id.*

19           117. The Biological Opinion and Supplemental Biological Opinion issued by NMFS  
 20 Defendants are legally deficient for reasons that include, but are not limited to, the following: the  
 21 Biological Opinions' conclusions are premised upon, and illegally apply, NMFS regulations that  
 22 are arbitrary and capricious and contrary to the plain meaning of ESA; the Biological Opinions'  
 23 Incidental Take Statements are incomplete, arbitrary and capricious, and contrary to law; the  
 24 Biological Opinions fail adequately to consider the best available scientific information; and the  
 25 Biological Opinions' conclusions are contrary to NMFS' findings, are not based on the evidence,  
 26 and are arbitrary and capricious.

27           118. NMFS' issuance of the Biological Opinions constitutes final agency action that  
 28 adversely affects and aggrieves Plaintiffs.

119. Under the APA, NMFS Defendants' violation of ESA as alleged herein is "arbitrary and capricious," an "abuse of discretion," "not in accordance with the law," and "without observance of procedure required by law." 5 U.S.C. §706(2)(A),(D).

#### PRAYER FOR RELIEF

Plaintiffs respectfully request that this Court:

1. Adjudge and declare that Defendants and each of them are in violation of the Marine Mammal Protection Act and its implementing regulations, and order that the Final Rule and LOAs be vacated, set aside and/or rescinded;

2. Adjudge and declare that Defendants and each of them are in violation of the National Environmental Policy Act and its implementing regulations, and order that the Record of Decision be vacated, set aside, and/or corrected;

3. Adjudge and declare that the NMFS Defendants and each of them are in violation of the Endangered Species Act and order that the Biological Opinions be vacated, set aside and/or rescinded;

4. Adjudge and declare that Defendants and each of them are in violation of the Administrative Procedure Act;

5. Issue a tailored injunction restraining and enjoining Defendants and each of them and their officers, employees, subdivisions and/or agents from permitting or proceeding with the SURTASS LFA program as currently authorized, or any portion thereof, unless and until adequate mitigation measures are implemented and the violations of federal law set forth herein have been corrected;

6. Award Plaintiffs their costs of suit and attorneys' fees; and

7. Grant Plaintiffs such other and further relief as the Court deems just and appropriate under the circumstances.

Dated: October 18, 2012

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